UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,812	06/14/2006	Tomoharu Nishioka	SPL-06-1130	8733
	7590 05/13/200 DLA PIPER US LLP	EXAMINER		
ONE LIBERTY PLACE			KASHNIKOW, ERIK	
1650 MARKET ST, SUITE 4900 PHILADELPHIA, PA 19103			ART UNIT	PAPER NUMBER
			1794	
			MAIL DATE	DELIVERY MODE
			05/13/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	10/582,812	NISHIOKA ET AL.			
Office Action Summary	Examiner	Art Unit			
	ERIK KASHNIKOW	1794			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w. - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	lely filed the mailing date of this communication. (35 U.S.C. § 133).			
Status					
Responsive to communication(s) filed on 14 Ju This action is FINAL. 2b) ☐ This Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro				
Disposition of Claims					
4) ☐ Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdrav 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-20 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or Application Papers 9) ☐ The specification is objected to by the Examine 10) ☐ The drawing(s) filed on 14 June 2006 is/are: a) Applicant may not request that any objection to the or	vn from consideration. relection requirement. r. ⊠ accepted or b) □ objected to	•			
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 06/14/2006, 02/07/2008.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ite			

Art Unit: 1794

DETAILED ACTION

Specification

1. The use of the trademark UBESTA® has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-4, 9, 10 and 13-18 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 12, 13, 16, 19, 20-23, 26 and 29-31 of copending Application No. 10/587,249. Although the

Page 3

conflicting claims are not identical, they are not patentably distinct from each other because the instant application claims at least two layers, comprising a layer of a polyamide 11 or 12, and a layer of a polyamide consisting of a dicarboxylic acid unit comprising a naphthalenedicarboxylic acid unit. The copending application teaches these as well as an additional layer. Since the instant application contains the term "at least two layers" this third layer, and the fourth layer in claims 22-23, 26 and 29-31 is an obvious variation of the instant application.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-4, 9, 10 and 13-18 are directed to an invention not patentably distinct from claims 1, 2, 19, 20 and 21 of commonly assigned 10/587,249. Specifically, see paragraph 3 for explanation of the rejection.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned 10/587,249, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

Art Unit: 1794

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

Claim Rejections - 35 USC § 112

- 4. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 5. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In this instant the independent claims (1 and 5) claim a layer comprising a polyamide, which is immediately followed by "(polyamide 9N)". It is unclear whether applicant is claiming any polyamide or specifically polyamide 9N.

Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 1-4, 9, 10 and 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoeppelmann (US 5,869,157) in view of Oka et al. (US 5,670,608).

Art Unit: 1794

8. In regards to claims 1, 2, 9, 10 and 16-18 Stoeppelmann teaches a 3 layer hose (claim 1) which comprises an outer layer of polyamide 12 (column 5 lines 58-59), and an intermediate layer formed of a polyamide with a terephthalic acid or naphthalendioic acid (naphthalendicarboxylic acid) end groups (column 3 lines 35-37) and diamine end groups (column 4 line 15). Stoeppelmann specifically points out that these parts can be used in the automotive industry (column 1 line 20-25).

- 9. In regards to claims 3 and 13 Stoeppelmann teaches that at least one of the layers is conductive, since there are only three layers it is obvious to one of ordinary skill in the art at the time of the invention that the innermost layer could be conductive (claim 4).
- 10. In regards to claims 4, 14 and 15 Stoeppelmann teaches that the articles can be formed by coextrusion (column 5 lines 25-32).
- 11. While Stoeppelmann teaches the 3 layer tube for use in the automotive industry above, he is silent regarding the concentrations of the dicarboxylic acid and diamine in the intermediate layer as well as with respect to the specific diamine.
- 12. Oka et al. teach compositions of polyamides with dicarboxylic acid and diamine groups (column 2 lines 45-50).
- 13. In regards to claim 1 Oka et al. teach that the diamine can be 1,9-nonaediamine (column 2 line 45-46).
- 14. Oka et al. teach that terephthalic acid is the preferred main dicarboxylic acid, however as stated above Stoeppelmann et al. teach that either terephthalic acid or naphthalendioic acid can be used. Oka teaches that the specific dicarboxylic acid

(terephthalic or naphthalendioic acid in this case) and the preferred diamine be present in amounts of 60-100 mol% of all the dicarboxylic acids and diamines present (column 2 lines 60-65).

- 15. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the tube of Stoeppelmann with the polyamide of Oka et al. because the tube of Stoeppelmann which has good chemical resistance and good barrier effect to chemical reagents (column 4 lines 45-50) would benefit from the superior moldability, excellent heat resistance and mechanical characteristics (column 1 lines 6-10) of the polyamide of Oka et al.
- 16. Claims 5-8, 11, 12, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoeppelmann (US 5,869,157) in view of Oka et al. (US 5,670,608) in further view of Mugge et al. (US 5,478,620).
- 17. As stated above Stoeppelmann and Oka et al. teach multilayer tubes suitable for use as fuel lines which comprise an outermost layer of polyamide 12 and an inner layer of a polyamide with dicarboxylic and diamine groups, however they are silent about an innermost layer of polyamide 11 or 12.
- 18. Mugge et al. teach a multilayer plastic pipe with polyamide inner and outer layers (column 1 lines 10-11).
- 19. Mugge et al. teach that these pipes can be used as fuel pipes and fuel lines for automobiles (claims 7 and 8).

Art Unit: 1794

20. Mugge et al. teach that the outer and inner layers of these pipes can be formed from various forms of polyamide 12 (column 4 lines 30-40).

- 21. All other limitations have already been rejected in the preceding 35 USC 103(a) rejection.
- 22. On of ordinary skill in the art at the time of the invention would be motivated to modify the tube of Stoeppelmann and Oka et al. with the inner layer of polyamide of Mugge et al. because the tubes of Stoeppelmann and Oka et al. which have good mechanical and chemical characteristics as described above would benefit from the dimensional stability and load bearing capacity of the pipes of Mugge et al. (column 1 lines 33-36).

Conclusion

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Schmitz et al. (US 6,794,048), which teaches polyamides layers of polyamides for use with fuel pipes.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIK KASHNIKOW whose telephone number is (571)270-3475. The examiner can normally be reached on Monday-Friday 7:30-5:00PM EST (First Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on (571) 272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1794

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Erik Kashnikow Examiner Art Unit 1794

/Callie E. Shosho/

Supervisory Patent Examiner, Art Unit 1794